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**ECONOMIC COMMISSION FOR EUROPE**

INLAND TRANSPORT COMMITTEE

Working Party on Transport Statistics  
(Fifty-second session, 14-16 November 2001,  
agenda item 4 (d) (ii))

**METHODOLOGICAL DEVELOPMENT AND  
HARMONIZATION OF TRANSPORT STATISTICS**

**Proposed modifications to the RAS Questionnaire**

**Note by the secretariat**

**I. BACKGROUND AND MANDATE**

1. In light of the decisions taken at the Task Force Meeting on Definitions on Road Traffic Accidents (TRANS/WP.6/2001/2) and to take into account the gender perspective conforming with ECOSOC Resolution 1997/17 and the ECE Plan of Action E/ECE/1997, the secretariat prepared a new version of the Road Accident Statistics (RAS) questionnaire, as reflected in the annex, to be discussed by the Working Party at its next session.

2. The Working Party may wish to review the following items and indicate which amendments, if any, should be retained in the RAS questionnaire.

**II. ITEMS TO BE CONSIDERED**

Table B. (Road traffic accidents involving personal injury by nature of accident)

3. According to the request of the Task Force on Definitions on Road Traffic Accidents (TRANS/WP.6/2001/2, para. 9), the secretariat proposes the following breakdown in order to include the accidents at level crossing.

TOTAL ACCIDENTS

Accidents between vehicle and pedestrian

Single vehicle accidents

Accidents between vehicles

- Rear-end collision

- Collisions due to crossing or turning

- **Collisions at level crossings**

- Head-on collisions

- Others including collisions with parked vehicles.

4. Furthermore, a new category has been included in the questionnaire for heavy goods vehicles (definition still has to be agreed upon) to follow-up the Task Force suggestion and to comply with the increased interest shown by data users.

Table C. (Persons killed or injured in road traffic accidents)

5. Following-up the Task Force request, in rubric 7, the term “commercial vehicles” has been replaced by “goods road vehicles”; rubric 8 has been broken down according to age as for the others rubrics.

6. To take into account the gender perspective in road accidents statistics, two new sub-rubrics of the total have been created (rubric 10. for Male and rubric 20. for Female) according to the same breakdown.

Table D. (Road traffic accidents involving one or more persons under the influence of alcohol)

7. As in table C, two new sub-rubrics of the total have been created (rubric 10. for Male and rubric 20. for Female) according to the same breakdown, to take into account the gender perspective in road accidents statistics .

Table F. (Population by age)

8. To follow the same logic as in tables C and D, in the population table a gender breakdown has been incorporated. Furthermore, the reporting unit has changed from “thousands” to “units”.

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**ANNEX**

**STATISTICS OF ROAD TRAFFIC ACCIDENTS  
IN EUROPE AND NORTH AMERICA**

**XXX**

**ANNUAL QUESTIONNAIRE ON ROAD TRAFFIC ACCIDENTS**

**(2000 DATA)**

**DONE BY =**

**ADDRESS =**

**TELEPHONE =**

**E-MAIL =**

**FAX =**

**DATE OF SENDING =**

Please return this Questionnaire to the Economic Commission for Europe, Transport Division, Palais des Nations, 1211 Geneva 10, by 15 September 2002.

For any enquiries regarding the Questionnaire, please contact Mr. André Sceia, UN/ECE Transport Division (Tel: +41-22-917-1313 / Fax: +41-22-917-0039 / Email: [stat.trans@unece.org](mailto:stat.trans@unece.org)).

**A - ROAD TRAFFIC ACCIDENTS INVOLVING PERSONAL INJURY**  
**BY TIME OF OCCURENCE AND SURROUNDINGS**

Description		Number of accidents		Number of persons killed or injured					
				Total		Killed		Injured	
		1999	2000	1999	2000	1999	2000	1999	2000
<b>1</b>	<b>TOTAL ACCIDENTS</b>								
<i>By location</i>									
21	Motorways								
22	Inside built-up areas (without motorways)								
23	Outside built-up areas (without motorways)								
<i>By month</i>									
301	January								
302	February								
303	March								
304	April								
305	May								
306	June								
307	July								
308	August								
309	September								
310	October								
311	November								
312	December								
<i>By day of week</i>									
41	Monday through Thursday								
42	Friday								
43	Saturday								
44	Sunday								
<i>By light condition</i>									
51	Daylight								
52	Twilight (or unknown)								
53	Darkness								
<i>By road condition</i>									
61	Dry road surface								
62	Other (wet, icy, etc.)								

For methodology, definition and space for explanatory notes, please refer to page 3.

**DEFINITIONS**

**SURROUNDINGS**

1. **Motorway**: Road, specially designed and built for motor traffic, which does not serve properties bordering on it, and which:
  - a) is provided, except at special points or temporarily, with separate carriageways for the two directions of traffic, separated from each other, either by a dividing strip not intended for traffic or, exceptionally, by other means;
  - b) does not cross at level with any road, railway or tramway track, or footpath; and
  - c) is specially sign-posted as a motorway. Accidents occurring on entries and exits of motorways are to be included under the category of motorway accidents.
2. **Built-up area**: An area with entries and exits specially sign-posted as such.

**Explanatory notes:**

**B - ROAD TRAFFIC ACCIDENTS INVOLVING PERSONAL INJURY**  
**BY NATURE OF ACCIDENT**

Description	Number of accidents		Number of persons killed or injured							
	1999	2000	Total		Killed		Injured			
			1999	2000	1999	2000	1999	2000		
<b>1</b>	<b>TOTAL ACCIDENTS (11+12+13)</b>									
11	Accidents between vehicle and pedestrian									
12	Single vehicle accidents									
13	Accidents between vehicles									
131	- Rear-end collision									
132	- Collisions due to crossing or turning									
1321	- <i>Collisions at level crossings</i>									
133	- Head-on collisions									
134	- Others including collisions with parked vehicles									
<b>2</b>	<b>TOTAL ACCIDENTS IN BUILT-UP AREAS (21+22+23) = (Item 22 of table A)</b>									
21	Accidents between vehicle and pedestrian									
22	Single vehicle accidents									
23	Accidents between vehicles									
231	- Rear-end collision									
232	- Collisions due to crossing or turning									
2321	- <i>Collisions at level crossings</i>									
233	- Head-on collisions									
234	- Others including collisions with parked vehicles									
<b>3</b>	<b>TOTAL ACCIDENTS INVOLVING HEAVY GOODS VEHICLES (Sum 31+32+33)</b>									
31	Accidents between vehicle and pedestrian									
32	Single vehicle accidents									
33	Accidents between vehicles									
331	- Rear-end collision									
332	- Collisions due to crossing or turning									
3321	- <i>Collisions at level crossings</i>									
333	- Head-on collisions									
334	- Others including collisions with parked vehicles									

For methodology, definition and space for explanatory notes, please refer to page 5.

### **CONCEPT**

In order to collect data covering the range of possible types of accidents, including accidents between vehicles, this questionnaire is based on the following breakdown of types of accidents:

- 1) Accidents between vehicle and pedestrian;
- 2) Single vehicle accidents;
- 3) Accidents between vehicles.

These three categories are mutually exclusive since (1) should cover all accidents in which at least one pedestrian was involved, irrespective of whether the pedestrian was involved in the first or in a later phase of the accident and whether the pedestrian was injured or killed on or off the road. Category (2) should contain all accidents involving no collision with other road users, and category (3) should thus cover the remainder of accidents not falling under (1) and (2).

### **DEFINITIONS**

#### **Types of accidents**

1. **Accidents between vehicle and pedestrian**: Accidents involving one or several vehicles and pedestrians irrespective of whether the pedestrian was involved in the first or a later phase of the accident and whether the pedestrian was injured or killed on or off the road.
2. **Single vehicle accidents**: Accidents involving no collision with other road users, even though they may be involved, i.e. vehicle trying to avoid collision and veering off the road, or accident caused by collision with obstructions or animals on the road. Collisions with parked vehicles belong to 3 (d) below.
3. **Accidents between vehicles**: (Not covered by 1 and 2 above)

The constituent element for classification of accidents between vehicles is the first collision on the carriageway or the first mechanical impact on the vehicle.

- a) **Rear-end collision**: Accident caused by a rear-end collision with another vehicle using the same lane of a carriageway moving in the same direction or temporarily stopping due to traffic conditions. Rear-end collisions with parked vehicles belong to (d) below;
- b) **Collision due to crossing or turning**: Accident caused by a rear-end or head-on collision with another vehicle moving in a lateral direction due to leaving or entry from/to another lane, road or premise. Rear-end or head-on collisions with vehicles waiting to turn belong to either (a) or (c);
- c) **Head-on collision**: Accident caused by a head-on collision with another vehicle using the same lane of a carriageway and moving in the opposite direction or temporarily stopping due to traffic conditions. Head-on collisions with parked vehicles belong to (d) below;
- d) **Other collision, including collisions with parked vehicles**: Accident caused by driving side by side, while overtaking each other or when changing lanes (cutting in on someone), or by a rear-end or head-on collision with a stationary vehicle which stops or parks deliberately and not as a result of traffic conditions at the edge of a carriageway, on shoulders, on marked parking spaces, on footpaths or parking sites.

#### **Explanatory notes:**





**C - PERSONS KILLED OR INJURED IN ROAD TRAFFIC ACCIDENTS**

Description			Number of persons killed				Number of persons injured			
			Total		of which: drivers		Total		of which: drivers	
			1999	2000	1999	2000	1999	2000	1999	2000
<b>4</b>	<b>DRIVERS AND PASSENGERS OF MOTOR CYCLES - Total</b>									
41	o f w h i c h	Under 6 years								
42		6 - 9 years								
43		10 - 14 years								
44		15 - 17 years								
45		18 - 20 years								
46		21 - 24 years								
47		25 - 64 years								
48		65 years and over								
49		Unknown								
<b>5</b>	<b>DRIVERS AND PASSENGERS OF MOTOR CARS - Total</b>									
51	o f w h i c h	Under 6 years								
52		6 - 9 years								
53		10 - 14 years								
54		15 - 17 years								
55		18 - 20 years								
56		21 - 24 years								
57		25 - 64 years								
58		65 years and over								
59		Unknown								
<b>6</b>	<b>DRIVERS AND PASSENGERS OF MOTOR COACHES, BUSES, TROLLEYBUSES AND TRAMCARS - Total</b>									
61	o f w h i c h	Under 6 years								
62		6 - 9 years								
63		10 - 14 years								
64		15 - 17 years								
65		18 - 20 years								
66		21 - 24 years								
67		25 - 64 years								
68		65 years and over								
69		Unknown								
<b>7</b>	<b>DRIVERS AND PASSENGERS OF COMMERCIAL VEHICLES - Total</b>									
71	o f w h i c h	Under 6 years								
72		6 - 9 years								
73		10 - 14 years								
74		15 - 17 years								
75		18 - 20 years								
76		21 - 24 years								
77		25 - 64 years								
78		65 years and over								
79		Unknown								
<b>8</b>	<b>OTHER PERSONS - Total</b>									
81	o f w h i c h	Under 6 years								
82		6 - 9 years								
83		10 - 14 years								
84		15 - 17 years								
85		18 - 20 years								
86		21 - 24 years								
87		25 - 64 years								
88		65 years and over								
89		Unknown								

**D - ROAD TRAFFIC ACCIDENTS INVOLVING ONE OR MORE PERSONS UNDER THE INFLUENCE OF ALCOHOL**

Description		1996	1997	1998	1999	2000
1	Accidents involving personal injury or death					
2	Persons killed					
3	Persons injured					

Number of pedestrians and drivers under the influence of alcohol, involved in accidents mentioned above based on analysis of alcohol concentration						
Description		1996	1997	1998	1999	2000
<b>0</b>	<b>Total (1+2+3+4+5+6+7) and (10+20)</b>					
0.1	- Up to 0.5‰					
0.2	- Between 0.5‰ and 0.8‰					
0.3	- Between 0.8‰ and 1.5‰					
0.4	- 1.5‰ and over					
<b>10</b>	<b>Total - Males</b>					
10.1	- Up to 0.5‰					
10.2	- Between 0.5‰ and 0.8‰					
10.3	- Between 0.8‰ and 1.5‰					
10.4	- 1.5‰ and over					
<b>20</b>	<b>Total - Females</b>					
20.1	- Up to 0.5‰					
20.2	- Between 0.5‰ and 0.8‰					
20.3	- Between 0.8‰ and 1.5‰					
20.4	- 1.5‰ and over					
<b>1</b>	<b>Pedestrians</b>					
1.1	- Up to 0.5‰					
1.2	- Between 0.5‰ and 0.8‰					
1.3	- Between 0.8‰ and 1.5‰					
1.4	- 1.5‰ and over					
<b>2</b>	<b>Drivers of cycles</b>					
2.1	- Up to 0.5‰					
2.2	- Between 0.5‰ and 0.8‰					
2.3	- Between 0.8‰ and 1.5‰					
2.4	- 1.5‰ and over					
<b>3</b>	<b>Drivers of mopeds</b>					
3.1	- Up to 0.5‰					
3.2	- Between 0.5‰ and 0.8‰					
3.3	- Between 0.8‰ and 1.5‰					
3.4	- 1.5‰ and over					
<b>4</b>	<b>Drivers of motor cycles</b>					
4.1	- Up to 0.5‰					
4.2	- Between 0.5‰ and 0.8‰					
4.3	- Between 0.8‰ and 1.5‰					
4.4	- 1.5‰ and over					
<b>5</b>	<b>Drivers of private cars</b>					
5.1	- Up to 0.5‰					
5.2	- Between 0.5‰ and 0.8‰					
5.3	- Between 0.8‰ and 1.5‰					
5.4	- 1.5‰ and over					
<b>6</b>	<b>Drivers of other power-driven vehicles</b>					
6.1	- Up to 0.5‰					
6.2	- Between 0.5‰ and 0.8‰					
6.3	- Between 0.8‰ and 1.5‰					
6.4	- 1.5‰ and over					
<b>7</b>	<b>Others</b>					
7.1	- Up to 0.5‰					
7.2	- Between 0.5‰ and 0.8‰					
7.3	- Between 0.8‰ and 1.5‰					
7.4	- 1.5‰ and over					

For methodology, definition and space for explanatory notes, please refer to page 9.

**CONCEPT**

Countries are requested to indicate below which of the following methods is used in determining whether pedestrians and drivers involved in road traffic accidents are under the influence of alcohol:

- a) observation by police
- b) screening test for alcohol from a sample of breath
- c) clinical medical examination
- d) quantitative determination of the concentration of alcohol in the blood from a sample of:
  - i) blood
  - ii) urine
  - iii) breath

and, where appropriate, the concentration of alcohol in the blood at which a person is deemed to be under the influence of alcohol.

**Explanatory notes:**

**E - MOTOR VEHICLE MOVEMENTS**  
**(All vehicles, irrespective of the country of registration)**

(Million Vehicle-kilometres)

<b>Description</b>		<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
1	Mopeds					
2	Motor cycles					
3	Passenger cars including taxis					
4	Motor coaches, buses and trolleybuses					
5	Tramcars					
6	Lorries and road tractors					
7	All power-driven vehicles including miscellaneous not shown separately					

**F - POPULATION BY AGE**

As at 31 December 2000											
	Total	Male	Female		Total	Male	Female		Total	Male	Female
0				34				68			
1				35				69			
2				36				70			
3				37				71			
4				38				72			
5				39				73			
6				40				74			
7				41				75			
8				42				76			
9				43				77			
10				44				78			
11				45				79			
12				46				80			
13				47				81			
14				48				82			
15				49				83			
16				50				84			
17				51				85			
18				52				86			
19				53				87			
20				54				88			
21				55				89			
22				56				90			
23				57				91			
24				58				92			
25				59				93			
26				60				94			
27				61				95			
28				62				96			
29				63				97			
30				64				98			
31				65				99			
32				66				100 &+			
33				67				TOTAL			